

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A hip prosthesis ~~An acetabular cup assembly~~ comprising:

a an acetabular liner including a hemispherical convex back and a face opposite the
hemispherical convex back, the hemispherical convex back defining a polar region, a
concave bearing surface extending into the liner through the face toward the polar region,
a screw thread spiraling around a portion of the hemispherical convex back, the screw
thread having a thread crest and a thread root, the thread crest following a spherical
profile as it spirals around the hemispherical convex back toward the polar region; and
a an acetabular shell including a hemispherical cavity for receiving the convex back, the
hemispherical cavity having a polar region, a screw thread spiraling around a portion of
the cavity, the screw thread having a thread root following a spherical profile as it spirals
around the cavity toward the polar region, the thread root being engageable with the
thread crest of the liner screw thread. ; and

~~means for retaining the liner in the shell, the means for retaining including a spherical profile~~
~~thread spiraling around a portion of each of the shell hemispherical cavity and liner~~
~~hemispherical convex back.~~

2. (Currently amended) The hip prosthesis ~~acetabular cup assembly~~ of claim 1 wherein ~~the liner~~
~~includes a liner screw thread having a spherical profile thread crest and a spherical profile thread~~
~~root, the liner thread root is being~~ coincident with the hemispherical convex back and the liner

thread crest projects projecting beyond the hemispherical convex back and follows following a spherical profile spaced from the spherical convex back.

3. (Withdrawn) The hip prosthesis acetabular cup assembly of claim 1 wherein the liner thread comprises ~~includes a liner screw thread having a spherical profile thread crest and a conical profile thread root~~ and the acetabular shell cavity thread comprises a corresponding conical profile thread crest.

4. (Withdrawn) The hip prosthesis acetabular cup assembly of claim 1 wherein the liner thread comprises ~~includes a liner screw thread having a spherical profile thread crest and a cylindrical profile thread root~~ and the acetabular shell cavity thread comprises a corresponding cylindrical profile thread crest.

5. (Canceled)

6. (Canceled)

7. (Currently amended) The hip prosthesis of claim 1 wherein ~~An acetabular cup assembly comprising: an acetabular liner having a generally hemispherical body with a face on one side of the body and a hemispherical convex back side opposite the face, the back side having a polar region, a concave bearing surface extending into the body through the face toward the polar region, the back side including a liner screw thread having a liner thread root and a liner thread crest spiraling around the back side, the liner thread crest having a spherical profile spirals spiraling over most of the hemispherical convex back~~ between the face and the polar region; and
an acetabular shell including a hemispherical concave mating surface, the concave mating surface including a shell screw thread engageable with the liner screw thread, the

~~shell screw thread having a spherical profile shell thread root spiraling over most of the hemispherical concave mating surface for receiving the liner thread crest.~~

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Currently amended) The hip prosthesis ~~acetabular cup assembly~~ of claim 7 wherein the liner thread and shell thread comprise a self-locking arrangement in which a portion of the shell thread profile differs in a dimension from a corresponding portion of the liner thread profile, the shell thread and liner thread defining a self-locking thread interference ~~such that upon screwing of the liner into the shell the portions interfere with one another.~~

13. (Canceled)

14. (Currently Amended) The hip prosthesis ~~system~~ of claim 1 ~~13~~ further comprising a femoral prosthesis including a stem portion and a head portion, the head portion being matingly engageable with the concave bearing surface of the acetabular liner.

15. (Currently Amended) The hip prosthesis ~~system~~ of claim 1 ~~13~~ further comprising bone cement positionable between the shell and acetabulum to fix the shell in the acetabulum.

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Currently Amended) The hip prosthesis acetabular cup assembly of claim 1 wherein ~~the liner includes a liner screw thread having a spherical profile thread crest and a spherical profile thread root, the liner having a hemispherical convex back, the liner thread crest is being coincident with the spherical convex back and the liner thread root extends extending into the spherical convex back and follows following a spherical profile spaced from the spherical convex back.~~

23. (New) A hip prosthesis comprising:

an acetabular liner including a hemispherical convex back and a face opposite the hemispherical convex back, the hemispherical convex back defining a polar region, a concave bearing surface extending into the liner through the face toward the polar region, a screw thread spiraling around a portion of the convex back, the screw thread having a thread crest and a thread root, the thread root following a spherical profile as it spirals around the hemispherical convex back toward the polar region; and

an acetabular shell including a hemispherical cavity for receiving the hemispherical convex back, a screw thread spiraling around a portion of the cavity, the hemispherical cavity having a polar region, the screw thread having a thread crest following a spherical profile as it spirals around the cavity toward the polar region, the thread crest being engageable with the thread root of the liner screw thread.

24. (New) The hip prosthesis of claim 23 wherein the liner thread comprises a conical profile thread crest.

25. (New) The hip prosthesis of claim 23 wherein the liner thread comprises a cylindrical profile thread crest.